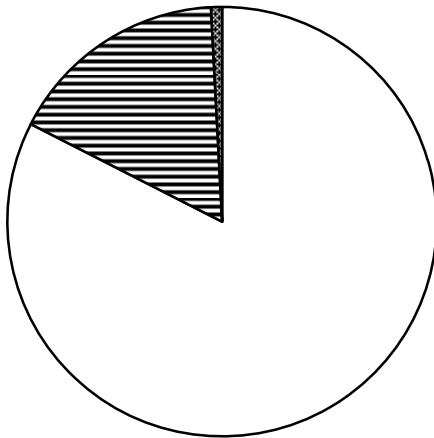


COMMUNICATIONS CAPITAL PROGRAM

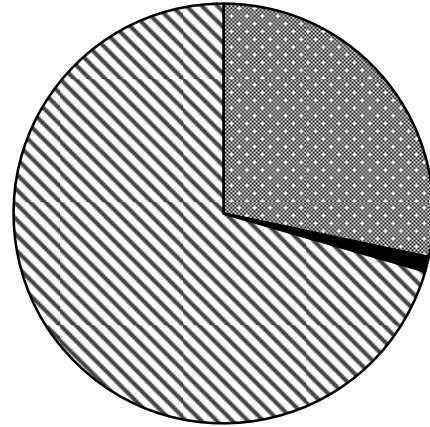
2009-2013 Capital Improvement Program

**2008-2009 Adopted
Source of Funds**



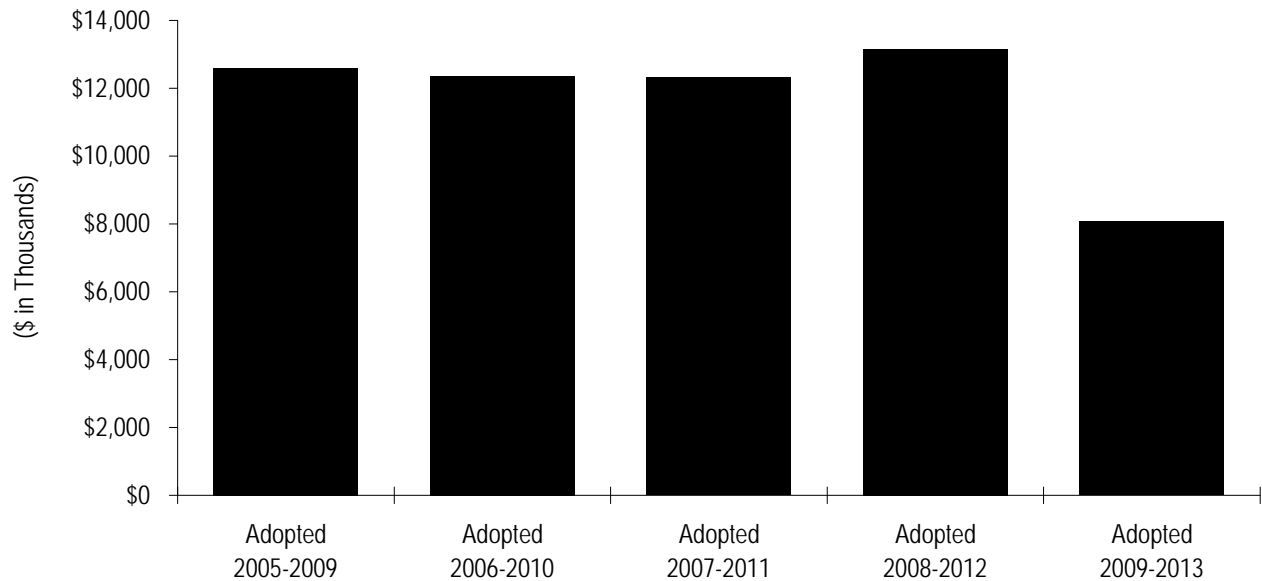
□ Beginning Fund Balance
 ▨ Taxes, Fees and Charges
 ▩ Federal Grant

**2008-2009 Adopted
Use of Funds**



▩ Construction
 ■ Non-Construction
 ▨ Ending Fund Balance

CIP History



Communications Capital Program

2009-2013 Adopted Capital Improvement Program

Overview

Introduction

In October 1990, the City assumed the responsibility of providing its own emergency communications service for police and fire from the County of Santa Clara. The Communications Capital Improvement Program (CIP) was set up to address the replacement and upgrade of both the public safety and non-public safety radio equipment. The inventory of equipment that is supported by this program consists of approximately 25 fixed-equipment sites; 100 base stations; and 6,700 mobile radios, portable radios, and mobile data systems. The 2009-2013 Adopted CIP provides funding of \$8.1 million of which \$4.7 million is allocated in 2008-2009.

This program is part of the Strategic Support City Service Area (CSA) and supports the following outcomes from that CSA: *Safe and Functional Public Infrastructure, Facilities and Equipment*; and *Effective Use of State-of-the-Art Technology*. In addition to two outcomes in the Strategic Support CSA, the program supports one outcome in the Public Safety CSA: *The Public Feels Safe Anywhere, Anytime in San José*.

Program Priorities and Objectives

The Communications CIP's guiding objective is the provision of reliable, necessary public and non-public safety-related communications equipment for all City employees who need this equipment for their jobs.

Based on the CSA outcomes supported by this program, the following list of priorities has been developed:

- Proactively replace public safety-related communications equipment and systems to ensure reliability and optimal performance, and compliance with rules of the Federal Communications Commission;
- Maintain existing radio equipment in a proactive manner to ensure optimal functionality and to extend the length of service; and
- Strategically plan for future major upgrades and technology changes.

A significant portion of the Communications CIP is allocated to equipment replacement and upgrades, which support each of the three priorities. This allocation provides funding to replace communications equipment over the next five years.

A trunking radio feasibility study was conducted in 2007-2008. Trunking, which is a way of using a set of frequencies in a more efficient manner than the traditional way, is used by many government entities that share a finite amount of radio spectrum. A trunked radio system is a radio system used to maximize available capacity in a two-way radio system. Groups of users are given a logical talkgroup to share for their communications, rather than a dedicated radio frequency. This study helped develop a trunking radio system implementation plan that includes site preparation and frequency coordination information. In addition, this study identified cost effective alternatives to traditional radio infrastructure that can improve the level of reliable mobile data services that are offered with the integration of additional wireless technology.

Communications Capital Program

2009-2013 Adopted Capital Improvement Program

Overview

Program Priorities and Objectives (Cont'd.)

Once implemented, trunking will enable the City to make efficient use of existing radio frequencies and utilize the upcoming 700 MHz band, prioritize communications to ensure that Police and Fire transmissions take precedence, as well as maximize the Fire Department's utilization of the new Radio Infrastructure system. The efficient use of existing frequencies is important because additional frequencies are not available and services to support the growing population continue to increase demand on the system. Additionally, trunking is required in order to provide interoperability with other Bay Area agencies and to interface with technology that will be supported by Urban Area Security Initiative (UASI) grant funding. Trunking will also allow the recording of transmissions on all channels, enabling play back for safety and debriefing purposes.

Sources of Funding

The Communications CIP receives 3.4% of the City's Construction and Conveyance (C&C) Tax. Approximately 98% of this tax is derived from a transfer tax imposed upon each transfer of real property with the remaining 2% generated from a construction tax levied on most types of construction. For the 2009-2013 CIP, it is assumed that collections allocated to the Communications Capital Program will fall to \$0.8 million in 2008-2009 (from the current year estimate of \$0.9 million), remain stable for one year, then increase slightly to an allocation of \$0.9 million annually for each of the remaining years of the CIP. The decline in the number of real estate transactions coupled with the effects of the recent subprime lending situation continues to negatively impact C&C

collections. As of June 2008, C&C collections experienced declines in 24 out of the 26 months, when compared to the same months in the prior year. This budget assumes that the housing market slowdown will bottom out within the next two years and C&C tax receipts will reflect a more sustainable level of ongoing housing resale activity, modestly increasing in the third year of the five-year CIP.

Program Highlights

Communications Equipment Replacement and Upgrade

As already highlighted, a majority of the Communications CIP is dedicated to equipment replacement and upgrade. These funds keep the City's communications sites, base stations, and approximately 6,700 mobile radios, portable radios, and mobile data systems functioning and up-to-date. The existing core radio equipment system and infrastructure was installed in 1990 and has an estimated 10-year life cycle for public safety equipment and 15-year life cycle for non-public safety equipment. The replacement of these systems started in 2005-2006 and is scheduled for completion in 2008-2009. When current equipment becomes due for replacement, the General Services Department plans to replace this equipment with trunking radio system equipment. This will ensure that current equipment maintains compatibility with the city-wide Trunking Radio System project.

To enhance the capacity and reliability of police and fire dispatch channels, replacement of the remaining two T-1 lines with microwave equipment is planned for 2008-2009 as part of the ongoing Equipment Replacement and Upgrade project. This will

Communications Capital Program

2009-2013 Adopted Capital Improvement Program

Overview

Program Highlights (Cont'd.)

Communications Equipment Replacement and Upgrade (Cont'd.)

result in all ten primary dispatch channels utilizing microwave technology.

City-Wide Supervisory Control and Data Acquisition (SCADA) System

A feasibility study for a City-Wide Supervisory Control and Data Acquisition (SCADA) System, a remote control and monitoring system for Municipal Water System, parks irrigation, and storm pump stations utilizing the existing city-wide paging system, is planned for 2008-2009. Cost savings would result from using a common telemetry system (a single device used to remotely monitor multiple subsystems), thus removing subsystems and multiple phone line charges.

Major Changes from the 2008-2012 Adopted CIP:

- Due to a change in the City-Wide Trunking Radio System project implementation schedule, this allocation was decreased by \$1.2 million from \$3.1 million in the 2008-2012 Adopted CIP to \$1.9 million in the 2009-2013 Adopted CIP.

Operating Budget Impact

It is anticipated that there will be no additional operating and maintenance costs associated with projects included in the 2009-2013 Adopted CIP.

Council Approved Revisions to the Proposed Capital Improvement Program

During the June Budget hearings, the City Council approved a rebudget for the the COPS 2003-2004 Interoperable Communications Grant in the amount of \$202,000 in the Communications C&C Fund and \$41,749 in the General Fund. In addition, a rebudget in the amount of \$9,000 for Public Art purposes was approved in the Communications C&C Fund.

Communications Capital Program
2009-2013 Adopted Capital Improvement Program
Source of Funds

SOURCE OF FUNDS	Estimated 2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	5-Year Total
<u>General Fund</u>							
Contributions, Loans and Transfers from: General Fund							
- COPS 2003-2004 Interoperable Communications Grant	4,499,127	41,749					41,749
Total General Fund	4,499,127	41,749					41,749
<u>Communications Construction & Conveyance Tax Fund</u>							
Beginning Fund Balance	4,504,093	3,916,280	3,347,280	1,957,280	1,177,280	650,280	3,916,280 *
Taxes, Fees & Charges:							
Construction and Conveyance Tax	918,000	782,000	782,000	850,000	850,000	850,000	4,114,000
Reserve for Encumbrances	647,187						
Total Communications Construction & Conveyance Tax Fund	6,069,280	4,698,280	4,129,280	2,807,280	2,027,280	1,500,280	8,030,280 *
TOTAL SOURCE OF FUNDS	10,568,407	4,740,029	4,129,280	2,807,280	2,027,280	1,500,280	8,072,029 *

* The 2009-2010 through 2012-2013 Beginning Balances are excluded from the FIVE-YEAR TOTAL SOURCE OF FUNDS to avoid multiple counting of the same funds.

Communications Capital Program
2009-2013 Adopted Capital Improvement Program

Use of Funds

	Estimated 2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	5-Year Total
<u>USE OF FUNDS</u>							
<u>Construction Projects</u>							
City-Wide Trunking Radio System			1,100,000	250,000	250,000	250,000	1,850,000
Fire Radio Infrastructure System	438,000						
1. COPS 2003-2004 Interoperable Communications Grant	4,499,127	41,749					41,749
2. COPS 2003-2004 Interoperable Communications Grant - Simulcast Sites	298,000	202,000					202,000
3. Communications Equipment Replacement and Upgrade	1,336,000	929,000	1,050,000	1,364,000	1,113,000	1,128,000	5,584,000
4. Fire Station 22 Radio Site		150,000					150,000
5. Public Art		20,000	22,000	16,000	14,000	14,000	86,000
Total Construction Projects	6,571,127	1,342,749	2,172,000	1,630,000	1,377,000	1,392,000	7,913,749
<u>Non-Construction</u>							
<u>General Non-Construction</u>							
CIP Action Team	1,000						
Trunking Radio System Feasibility Study	80,000						
6. City-Wide SCADA System Feasibility Study		50,000					50,000
Total General Non-Construction	81,000	50,000					50,000
Total Non-Construction	81,000	50,000					50,000
Ending Fund Balance	3,916,280	3,347,280	1,957,280	1,177,280	650,280	108,280	108,280*

Communications Capital Program
2009-2013 Adopted Capital Improvement Program

Use of Funds

	Estimated 2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	5-Year Total
USE OF FUNDS (CONT'D.)							
TOTAL USE OF FUNDS	10,568,407	4,740,029	4,129,280	2,807,280	2,027,280	1,500,280	8,072,029*

* The 2008-2009 through 2011-2012 Ending Balances are excluded from the FIVE-YEAR TOTAL USE OF FUNDS to avoid multiple counting of the same funds.

Communications Capital Program
2009-2013 Adopted Capital Improvement Program
2008-2009 Use of Funds by Funding Source

	(001) General Fund	(397) Communications Construction & Conveyance Tax Fund	Total
TOTAL RESOURCES	41,749	4,698,280	4,740,029
<u>Construction Projects</u>			
1. COPS 2003-2004 Interoperable Communications Grant	41,749		41,749
2. COPS 2003-2004 Interoperable Communications Grant - Simulcast Sites		202,000	202,000
3. Communications Equipment Replacement and Upgrade		929,000	929,000
4. Fire Station 22 Radio Site		150,000	150,000
5. Public Art		20,000	20,000
Total Construction Projects	41,749	1,301,000	1,342,749
<u>Non-Construction</u>			
6. City-Wide SCADA System Feasibility Study		50,000	50,000
Total Non-Construction		50,000	50,000
Ending Fund Balance		3,347,280	3,347,280
TOTAL USE OF FUNDS	41,749	4,698,280	4,740,029

Communications Capital Program
2009-2013 Adopted Capital Improvement Program
Detail of Capital Projects

1. COPS 2003-2004 Interoperable Communications Grant

CSA:	Strategic Support	Initial Start Date:	4th Qtr. 2004
CSA Outcome:	Effective Use of State-of-the-Art Technology	Revised Start Date:	2nd Qtr. 2005
Department:	General Services	Initial Completion Date:	4th Qtr. 2005
Council District:	City-wide	Revised Completion Date:	1st Qtr. 2009
Location:	City-wide		

Description: This allocation provides funding for upgrading the microwave network for the City of San José and Santa Clara County and establishing microwave links in the North, South, and West areas of Santa Clara County to provide complete communications coverage.

Justification: The ability to provide services to the City and County requires the upgrade of the City's communication equipment. San José, in conjunction with the Silicon Valley Regional Interoperability Project Group (SVRIP), prepared a grant application which demonstrated how the funding will help all agencies in the Santa Clara County region achieve interoperability among the fire service, law enforcement and emergency medical service communities. The grant will reduce the reliance on the General Fund and/or the Construction and Conveyance Tax Fund for the costs of the upgrade and replacement.

EXPENDITURE SCHEDULE (000'S)										
Cost Elements	Prior Years	2007-08 Appn.	2007-08 Estimate	2008-09	2009-10	2010-11	2011-12	2012-13	5-Year Total	Beyond 5-Year
Equipment		4,541	4,499	42				42		
TOTAL		4,541	4,499	42				42		

FUNDING SOURCE SCHEDULE (000'S)										
General Fund		4,541	4,499	42				42		
TOTAL		4,541	4,499	42				42		

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

Major Changes in Project Cost:

None

Notes:

FY Initiated:	2003-2004	Redevelopment Area:	N/A
Initial Project Budget:	\$4,818,000	SNI Area:	N/A
Appn. #:	6073	USGBC LEED:	N/A

Communications Capital Program
2009-2013 Adopted Capital Improvement Program
Detail of Capital Projects

2. COPS 2003-2004 Interoperable Communications Grant - Simulcast Sites

CSA:	Strategic Support	Initial Start Date:	4th Qtr. 2007
CSA Outcome:	Effective Use of State-of-the-Art Technology	Revised Start Date:	
Department:	General Services	Initial Completion Date:	2nd Qtr. 2008
Council District:	City-wide	Revised Completion Date:	1st Qtr. 2009
Location:			

Description: This allocation provides funding for the purchase of equipment which will make radio sites simulcast-ready and fully compatible with an upgraded microwave network, which is planned to be completed by January 2009 as part of COPS 2003-2004 Interoperable Communications Grant project.

Justification: The ability to provide services to the City and County requires the upgrade of the City's communication equipment. San José, in conjunction with the Silicon Valley Regional Interoperability Project Group (SVRIP), prepared a grant application which demonstrated how the funding will help all agencies in the Santa Clara County region achieve interoperability among the fire service, law enforcement and emergency medical service communities. The grant will reduce the reliance on the General Fund and/or the Construction and Conveyance Tax Fund for the costs of the upgrade and replacement.

EXPENDITURE SCHEDULE (000'S)										
Cost Elements	Prior Years	2007-08 Appn.	2007-08 Estimate	2008-09	2009-10	2010-11	2011-12	2012-13	5-Year Total	Beyond 5-Year
Equipment		500	298	202					202	
TOTAL		500	298	202					202	

FUNDING SOURCE SCHEDULE (000'S)										
Communications Construction & Conveyance Tax Fund		500	298	202					202	
TOTAL		500	298	202					202	

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

Major Changes in Project Cost:

None

Notes:

FY Initiated:	2007-2008	Redevelopment Area:	N/A
Initial Project Budget:	\$500,000	SNI Area:	N/A
Appn. #:	6215	USGBC LEED:	N/A

Communications Capital Program
2009-2013 Adopted Capital Improvement Program
Detail of Capital Projects

3. Communications Equipment Replacement and Upgrade

CSA:	Strategic Support	Initial Start Date:	Ongoing
CSA Outcome:	Effective Use of State-of-the-Art Technology	Revised Start Date:	
Department:	General Services	Initial Completion Date:	Ongoing
Council District:	City-wide	Revised Completion Date:	
Location:	City-wide		

Description: This allocation funds the replacement of communications equipment based upon useful life expectancy. Funding is allocated for the replacement of extensive fixed point (base station) radio equipment at four sites in 2008-2009.

Justification: This allocation funds essential communications equipment for Police, Fire, and non-public safety City operations.

EXPENDITURE SCHEDULE (000'S)										
Cost Elements	Prior Years	2007-08 Appn.	2007-08 Estimate	2008-09	2009-10	2010-11	2011-12	2012-13	5-Year Total	Beyond 5-Year
Equipment		1,336	1,336	592	700	1,000	734	734	3,760	
Program Management				337	350	364	379	394	1,824	
TOTAL		1,336	1,336	929	1,050	1,364	1,113	1,128	5,584	

FUNDING SOURCE SCHEDULE (000'S)										
Communications Construction & Conveyance Tax Fund		1,336	1,336	929	1,050	1,364	1,113	1,128	5,584	
TOTAL		1,336	1,336	929	1,050	1,364	1,113	1,128	5,584	

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

Major Changes in Project Cost:

N/A

Notes:

Project schedule, dates, and selected budget information are not provided due to the ongoing nature of this project.

FY Initiated:	Ongoing	Redevelopment Area:	N/A
Initial Project Budget:		SNI Area:	N/A
Appn. #:	4056	USGBC LEED:	N/A

Communications Capital Program
2009-2013 Adopted Capital Improvement Program
Detail of Capital Projects

4. Fire Station 22 Radio Site

CSA:	Strategic Support	Initial Start Date: 2nd Qtr. 2009
CSA Outcome:	Effective Use of State-of-the-Art Technology	Revised Start Date:
Department:	General Services	Initial Completion Date: 1st Qtr. 2010
Council District:	City-wide	Revised Completion Date:
Location:	6461 Bose Lane	

Description: This allocation provides funding to build a radio site at Fire Station 22 which will provide voice and data equipment coverage in Almaden Valley.

Justification: The radio site is necessary to alleviate voice and data equipment coverage issues in Almaden Valley.

EXPENDITURE SCHEDULE (000'S)										
Cost Elements	Prior Years	2007-08 Appn.	2007-08 Estimate	2008-09	2009-10	2010-11	2011-12	2012-13	5-Year Total	Beyond 5-Year
Equipment				150					150	
TOTAL				150					150	

FUNDING SOURCE SCHEDULE (000'S)										
Communications Construction & Conveyance Tax Fund				150					150	
TOTAL				150					150	

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

Major Changes in Project Cost:

None

Notes:

FY Initiated:	2008-2009	Redevelopment Area:	N/A
Initial Project Budget:	\$150,000	SNI Area:	N/A
Appn. #:	6438	USGBC LEED:	N/A

Communications Capital Program
2009-2013 Adopted Capital Improvement Program
Detail of Capital Projects

5. Public Art

CSA:	Strategic Support	Initial Start Date:	Ongoing
CSA Outcome:	Safe and Functional Public Infrastructure, Facilities, and Equipment	Revised Start Date:	
Department:	General Services	Initial Completion Date:	Ongoing
Council District:	City-wide	Revised Completion Date:	
Location:	City-wide		

Description: This allocation funds the construction and administration of public art in the Communications Capital Program. In compliance with the Council adoption of the revised Public Art Master Plan on March 13, 2007, one percent of all construction project funding is required to be allocated to public art, excluding funding for seismic and ADA retrofits, maintenance and operations, non-construction projects (such as studies), or affordable housing. Projects where public art allocations were previously programmed or appropriated are not subject to the revisions of the Public Art Master Plan. Expenditures in this allocation will be subject to the legal revenue restrictions for the use of this funding on public art.

Justification: This allocation is required to comply with the revisions to the Public Art Master Plan adopted by the City Council on March 13, 2007.

EXPENDITURE SCHEDULE (000'S)										
Cost Elements	Prior Years	2007-08 Appn.	2007-08 Estimate	2008-09	2009-10	2010-11	2011-12	2012-13	5-Year Total	Beyond 5-Year
Public Art		9		20	22	16	14	14	86	
TOTAL		9		20	22	16	14	14	86	
FUNDING SOURCE SCHEDULE (000'S)										
Communications Construction & Conveyance Tax Fund		9		20	22	16	14	14	86	
TOTAL		9		20	22	16	14	14	86	
ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

Major Changes in Project Cost:

N/A

Notes:

Project schedule, dates, and selected budget information are not provided due to the ongoing nature of this project.

FY Initiated:	Ongoing	Redevelopment Area:	N/A
Initial Project Budget:		SNI Area:	N/A
Appn. #:	5953	USGBC LEED:	N/A

Communications Capital Program
2009-2013 Adopted Capital Improvement Program
Detail of Capital Projects

6. City-Wide SCADA System Feasibility Study

CSA:	Strategic Support	Initial Start Date: 4th Qtr. 2008
CSA Outcome:	Safe and Functional Public Infrastructure, Facilities, and Equipment	Revised Start Date:
Department:	General Services	Initial Completion Date: 2nd Qtr. 2009
Council District:	City-wide	Revised Completion Date:
Location:	City-wide	
Description:	This allocation provides funding for a feasibility study for a city-wide Supervisory Control and Data Acquisition (SCADA) system, a remote control and monitoring system for the Municipal Water System, parks irrigation, and storm pump stations utilizing the existing city-wide paging system.	
Justification:	Cost savings could result from using a common telemetry system removing subsystems and multiple phone line charges.	

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2007-08 Appn.	2007-08 Estimate	2008-09	2009-10	2010-11	2011-12	2012-13	5-Year Total	Beyond 5-Year	Project Total
Master Plan/Study				50					50		50
TOTAL				50					50		50

FUNDING SOURCE SCHEDULE (000'S)			
Communications	50	50	50
Construction & Conveyance Tax Fund			
TOTAL	50	50	50

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

Major Changes in Project Cost:

None

Notes:

FY Initiated:	2008-2009	Redevelopment Area:	N/A
Initial Project Budget:	\$50,000	SNI Area:	N/A
Appn. #:	6445	USGBC LEED:	N/A

Communications Capital Program

2009-2013 Adopted Capital Improvement Program

Summary of Projects that Start after 2008-2009

Project Name: City-Wide Trunking Radio System
5-Year CIP Budget: \$1,850,000
Total Budget: \$1,850,000
USGBC LEED N/A

Council District: City-wide
Estimated Start Date: 2009-2010
Estimated End Date: TBD

Description: This project will provide the infrastructure for a trunked radio system that maximizes available capacity in a two-way radio system, increasing capacity without adding frequencies. The Trunking Feasibility Study is expected to provide more detail regarding the timeline and costs of this project. The estimated end date for the City-Wide Trunking Radio System project will be identified during 2008-2009 as the results of the Trunking Feasibility Study are analyzed and compared against available resources.
